Separation of periodic points in holomorphic dynamics

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Non-repelling periodic points play an important role in any discrete dynamical system, and their relation to the singularities of the inverse function has been one of the keys for the development of the theory of holomorphic dynamics. In this setting, we will show how non-repelling fixed points can be separated from each other by means of "external rays" (invariant curves with trivial dynamics). During the talk, we will explain the first Separation Theorem for polynomials, by Goldberg and Milnor, and its generalization to wider classes of maps. Finally we will comment on recent advances on the topic.